

**REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed July 16, 2003. In order to advance prosecution of this case, Applicants amend Claims 1-4 and 10. Applicants add new Claims 34-39. Applicants respectfully request reconsideration and favorable action in this case.

**Objections to the Specification**

The Examiner objects to the disclosure for certain informalities. Specifically, the Examiner states that the Applicants must provide serial numbers and filing dates of related applications and that all attorney docket numbers must be deleted. Applicants have amended Page 1, lines 5-19 of the Specification to cure these deficiencies. Accordingly, Applicants respectfully request that the objection to the Specification be withdrawn.

**Section 112 Rejections**

The Examiner rejects Claims 1-25 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner rejects Claim 1, lines 4-5 because "it is unclear what applicant intends by the communication paths forming at least a portion of a coupling between the first and second connectors." (Office Action, page 2). Applicants respectfully traverse this rejection. According to Claim 1, there is a coupling between the first and second connectors and a plurality of ethernet communication paths form at least a portion of this coupling. For example, the Specification provides that "[e]thernet communication links 119 distribute data between a respective web-server processing card 32 and a hub chip 120. A communication link 122 provides a communication path between hub chip 120 and an RJ-45 connector 124." (Specification, page 32, lines 10-14). Accordingly, Applicants submit that the portion of Claim 1 reciting "a plurality of ethernet communication paths forming at least a portion of a coupling between the first and second connectors" is not indefinite for failing to particularly point out and distinctively claim the subject matter which Applicants regard as the invention. To advance prosecution of this case, however, Applicants have amended Claim 1 to recite that "a plurality of ethernet communication paths forming at least a portion of a communication coupling between the first and second connectors."

The Examiner also rejects Claim 1, line 6 because "the configuration of the first connector to receive a third connector associated with a mid-plane is unclear." (Office Action, page 2). For purposes of this argument, Applicants assume that the Examiner is referring to the limitation reciting that "the first connector configured to receive a third connector associated with a midplane." Because the recited claim language is not indefinite, Applicants respectfully traverse this rejection. The recited claim language merely points out that the configuration of the first connector allows it to receive a third connector that is associated with a midplane. An example of how a connector can be configured to receive a third connector is provided in the Specification. For example, the Specification provides that "[n]etwork interface card 66 includes an eighty pin SCA connector 118 in order to couple management network interface card 66 with passive mid-plane 34." In this example, the configuration of the connector (eighty pin SCA) allows it to receive a connector associated with the passive midplane. (Specification, page 32, lines 8-10). Accordingly, Applicants submit that the portion of Claim 1 reciting that "the first connector configured to receive a third connector associated with a midplane" is not unclear.

For at least these reasons, Applicants respectfully submit that Claim 1 is in accordance with 35 U.S.C. § 112, second paragraph. Therefore, Applicants respectfully request reconsideration and allowance of Claim 1, together with Claims 2-9 that depend from Claim 1.

Regarding Claim 10, the Examiner rejects lines 5-6 because "the connection of the first and second connectors being adapted to receive a plurality of first Ethernet communication links, through a midplane associated with a plurality of web server processing cards is unclear." (Office Action, page 2). For purposes of this argument, Applicants assume the Examiner is referring to the limitation previously reciting "first and second connectors coupled with the first printed circuit board, each of the first and second connectors adapted to receive a plurality of first ethernet communications links, through a midplane associated with a plurality of web server processing cards." Applicants have amended Claim 10, however, to recite "first and second connectors coupled with the first printed circuit board, each of the first and second connectors configured to receive a plurality of first ethernet communications links, through a midplane associated with a plurality of web server processing cards." Applicants respectfully submit that the amended Claim language is

not indefinite. The limitation merely points out that the configuration of the first and second connectors allows it to be receive a plurality of ethernet communications links. An example of how the first and second connectors may be configured to receive a plurality of ethernet communications links is provided in the Specification. For example, the Specification provides that "[n]etwork interface card 66 includes an eighty pin SCA connector 118 in order to couple management network interface card 66 with passive mid-plane 34." (Specification, page 32, lines 8-10). "On its front face 275, passive midplane 34 includes a plurality of web server processing card connectors 276 which facilitate the installation of up to twenty-four web server processing cards." (Specification, page 38, lines 3-7). Accordingly, Applicants submit that the portion of Claim 10 reciting that "each of the first and second connectors adapted to receive a plurality of first ethernet communications links, through a midplane associated with a plurality of web server processing cards" is not unclear.

For at least these reasons, Applicants respectfully submit that Claim 10 is in accordance with 35 U.S.C. § 112, second paragraph. Therefore, Applicants respectfully request reconsideration and allowance of Claim 10, together with Claims 11-25 that depend from Claim 10.

### **Section 102 Rejections**

The Examiner rejects Claims 1-4 and 7 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,115,755 issued to Krishan ("*Krishan*"). Because *Krishan* does not teach each and every element in Applicant's claims, Applicants respectfully traverse these rejections.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. § 2131. In addition, "[t]he identical invention must be shown in as complete detail as is contained in the claims" and "[t]he elements must be arranged as required by the claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); M.P.E.P. § 2131 (*emphasis added*). Whether considered alone or in combination with any other cited references, *Krishan* does not disclose, either expressly or inherently, each and every element of the claims.

For example, *Krishan* does not disclose, teach, or suggest "a chip coupled with the first printed circuit board wherein the plurality of ethernet communications paths couple the first connector with the chip," as recited in Applicant's Claim 1. In the Office Action, the Examiner states that "*Krishan* discloses a network interface card (figure 5) comprising . . . first and second connectors (47, 42) coupled with the first printed circuit board . . . [and] a chip (36) coupled with the first connector." (Office Action, page 3). The Examiner, however, fails to specifically point out which item the Examiner regards as the "first connector" and which item the Examiner regards as the "second connector." Additionally, the Examiner fails to specifically point out where *Krishan* discloses that the chip is coupled with first connector over a plurality of ethernet communication paths. Instead, the Examiner merely states that the chip is "interfacing with the first connector." (Office Action, page 3).

Whether you consider item 47 or item 42 of Figure 5 as the equivalent of the recited first connector, *Krishan* fails to disclose the recited elements of Claim 1. Regarding item 47, *Krishan* merely discloses that "network hub circuitry 36 is connected to network interface controller circuitry 32, and to a plurality of ports 47, which preferably comprise standard RJ-45 type modular jacks." (Column 5, lines 30-33). "The host computer runs driver software which permits . . . network hub circuitry 36 to be used to communicate with other computers

and peripheral devices connected to card 30 through ports 47 and cascade port 45." (Column 5, lines 54-60). "Network hub circuitry 36 repeats any signal received from any of ports 47 or network interface controller circuitry 32 to all other of ports 47 and network interface controller circuitry 32." (Column 5, lines 33-36). Thus, the plug-in card disclosed in *Krishan* merely includes a single connection between hub circuitry 36 and port 47. (Figure 5). Further, network hub circuitry 36 merely acts as a repeater by transmitting any incoming signals from a single port 47 to every other port 47. Accordingly, a "plurality of ethernet communications paths" cannot be said to couple item 47 and hub circuitry 36.

Regarding item 42, *Krishan* discloses that connector 42 is coupled to hub circuitry 36 through network interface controller circuitry 32, PCI interface circuitry 39, and modem circuitry 34. (Figure 5). Additionally, connector 42 is coupled to hub circuitry 36 through processor 62 which is then coupled to PCI interface circuitry 39 and modem circuitry 34. (Figure 5). "Modem circuitry 34 includes telephone interface circuitry 40, which interfaces with modem circuitry 34 to a telephone line through connector 42, which preferably comprises a standard RJ-11 type modular telephone jack." (Column 4, lines 54-57). Accordingly, a "plurality of ethernet communications paths" also cannot be said to couple item 42 and hub circuitry 36.

For at least these reasons, *Krishan* does not disclose, teach, or suggest "a chip coupled with the first printed circuit board wherein the plurality of ethernet communications paths couple the first connector with the chip," as recited in Applicant's Claim 1. Applicants respectfully request reconsideration and allowance of Applicant's Claim 1.

Dependent Claims 2-4 and 7 that depend upon independent Claim 1 are not anticipated by *Krishan*, because they include the limitations of independent Claim 1 and add additional elements that further distinguish the art. As just one example, Claim 2 recites that "a fourth connector" and that a "plurality of ethernet paths form at least a portion of the coupling between the fourth connector and the chip." As another example, Claim 3 recites that a "fourth connector is operable to distribute data between the single board computer and the management network." For reasons similar to those described above with regard to Claim 1, the recited elements are completely absent from the teachings of *Krishan*.

Dependent Claim 7 recites that "the chip includes a switch chip." Regarding network hub circuitry 36, however, *Krishan* merely discloses that "network hub circuitry 36 repeats

any signal received from any of ports 47 or network interface controller circuitry 32 to all other of ports 47 and network interface controller circuitry 32." Thus, the network hub circuitry 36 merely repeats the signals to all ports connected with network hub circuitry 36 and does not include a "switch chip." This element is also absent from the teachings of *Krishan*.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 2-4 and 7.

### **Section 103 Rejections**

The Examiner rejects Claims 5-6, 8-21 and 23-25 under 35 U.S.C. § 103(a) as being unpatentable over *Krishan* and in view of U.S. Patent No. 6,459,700 issued to Hoang. ("*Hoang*"). Applicants respectfully traverse these rejections for the reasons stated below.

First, the Examiner has not cited language in either reference or within information commonly known to those skilled in the art that provides the necessary motivation or suggestion to combine these two references. For example, in rejecting independent Claim 10, the Examiner speculates "it would have been obvious" to make the proposed combination "for the purpose of providing control for a plurality of network interface cards." (Office Action, page 5). Such speculation, however, is not evidence. Even where an invention is, as a whole, fully disclosed by a combination of prior art elements, such elements cannot be combined to defeat a patent as obvious unless the art teaches or suggests the desirability of making the claim combination. *ASC Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572 (Fed. Cir. 1984). Without such independent suggestion, the art is to be considered as merely inviting unguided and speculative experimentation which is not the standard with which obviousness is determined. *Agmen Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200 (Fed. Cir. 1991). The Examiner presents no evidence that suggests or motivates the combination. The M.P.E.P confirms that this approach is improper and should not be used here.

Second, Applicants respectfully submit that neither *Krishan* nor *Hoang* recite each and every limitation recited in Applicant's claims. For example, neither *Krishan* nor *Hoang* recite each and every limitation of Applicant's independent Claim 10. As discussed above with regard to Claim 1, *Krishan* merely discloses "network hub circuitry 36 "connected to

network interface controller circuitry 32, and to a plurality of ports 47, which preferably comprise standard RJ-45 type modular jacks." (Column 5, lines 30-33). In contrast, *Hoang* discloses a multiple segment network device configured for a stacked arrangement via a common backplane." (Abstract). In the Office Action, the Examiner states that "*Krishan* discloses the instant claimed invention except for the additional Ethernet communication links being coupled with the first card circuit board to control a plurality of web server processing cards." (Office Action, page 5). The Examiner relies on *Hoang* for disclosure of these features. The Examiner, however, fails to identify where either reference disclose "a high density communication path coupling the chip with a third connector . . . wherein the chip is operable to distribute data communications between one of the first and second connectors, and the third connector," as recited in independent Claim 10. Applicants respectfully submit that neither *Krishan* nor *Hoang* disclose the recited features.

With respect to *Krishan*, whether you consider item 47 or item 42 of Figure 5 as the equivalent of the recited third connector, *Krishan* fails to disclose the recited elements of Claim 10. Regarding item 47, and as discussed above with regard to Claim 1, *Krishan* merely discloses that network hub circuitry 36 is "connected to network interface controller circuitry 32, and to a plurality of ports 47, which preferably comprise standard RJ-45 type modular jacks." (Column 5, lines 30-33). Regarding item 42, *Krishan* merely discloses connector 42 is coupled to hub circuitry 36 through network interface controller circuitry 32, PCI interface circuitry 39, and modem circuitry 34. (Figure 5). Additionally, connector 42 is coupled to hub circuitry 36 through processor 62 which is then coupled to PCI interface circuitry 39 and modem circuitry 34. (Figure 5). Accordingly, *Krishan* does not disclose, teach, or suggest either "a high density communication path" or a "third connector" as recited in Applicant's Claim 10.

Even if the Examiner is relying on *Hoang* for disclosure of the recited elements, Applicants respectfully submit that the deficiencies of *Krishan* are not cured by combining the plug-in card of *Krishan* with the teachings of *Hoang*. *Hoang* merely discloses "a plurality of network devices . . . coupled together in a managed stack configuration." (Column 5, lines 3-7). "The network devices are multiple port repeaters 102, 104, 106, 108, and 110 physically and logically coupled together across a common backplane bus 112." (Column 5, lines 7-9). Thus, *Hoang* is limited to a stacked configuration of repeaters. At a minimum,

*Hoang* does not disclose, teach, or suggest "coupling [a] chip with a third connector," as recited in Applicant's Claim 1. Accordingly, *Hoang* cannot be said to disclose "a high density communication path coupling the chip with a third connector." The recited elements are completely absent from the teachings of *Hoang*.

For at least these reasons, Applicants submit that independent Claim 10 is obvious over the proposed combination of references. Applicants respectfully request reconsideration and allowance of Claim 10.

Dependent Claims 5-6 and 8-9 depend from Claim 1, which Applicants have shown above to be allowable. Additionally, Claims 8-9 depend from Claim 2, which Applicants have also shown above to be allowable. Dependent Claims 11-21 and 23-25 depend from Claim 10, which Applicants have shown above to be allowable. For at least these reasons, Claims 5-6, 8-9, 11-21, and 23-25 are allowable over the prior art. Additionally, Applicants respectfully submit that the proposed *Krishan-Hoang* combination does not disclose each and every feature as recited in Applicant's dependent Claims.

As just one example, Claim 8 recites that the "third connector includes a gigabit ethernet connector." As another example, Claim 9 recites that the "third connector includes a gigabit interface connector (GBIC)." For reasons similar to those described above with regard to Claims 1-4, the recited elements are completely absent from the teachings of *Krishan*. Regarding *Hoang*, the Examiner has not specifically identified a portion of *Hoang* that discloses the recited features. However, for reasons similar to those discussed above with regard to Claim 10, Applicants respectfully submit that *Hoang* does not disclose a "third connector," as recited in Claims 8-9.

As a further example, dependent Claim 12 recites that "the chip includes a switch chip." The Examiner relies on *Krishan* for disclosure of these features. For reasons similar to those discussed above with regard to Claim 7, Applicants respectfully submit the recited features are not disclosed, taught, or suggested by *Krishan*. Dependent Claims 15-16 and 20-22 depend from dependent Claim 12 and recite further functionality of the "switch chip" disclosed in Claim 12 and shown to be allowable. Accordingly, Applicants respectfully submit that Claims 15-16 and 20-22 are also allowable.

As a further example still, dependent Claim 14 recites that "the network hub includes a repeater chip having at least ten ports." The Examiner relies on *Hoang* for disclosure of the



recited features. (Office Action, page 6). As discussed above, however, *Hoang* merely discloses "a stacked arrangement of repeaters 102, 104, 106, 108, and 110. Each of the repeaters are coupled together across a common backplane 112." (Column 5, lines 3-7). Although *Hoang* discloses that "the managing repeater 102 also includes a serial port 114 that couples to and interfaces with the management platform 116 for various purposes including "out-of-band" management" (Column 6, lines 61-64), *Hoang* does not disclose that repeaters 102, 104, 106, 108, and 110 include any additional ports. Thus, *Hoang* does not disclose, teach, or suggest "a repeater chip having at least ten ports," as disclosed in Applicant's dependent Claim 14.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Applicant's Claims 5-6, 8-9, 11-21, and 23-25.

The Examiner rejects Claim 22 under 35 U.S.C. § 103(a) as being unpatentable over *Krishan* in view of *Hoang*, as applied to Claim 12 above, and in further view of U.S. Patent No. 6,418,120 issued to Yona et al. ("*Yona*"). Applicants respectfully traverse these rejections for the reasons stated below.

First, the Examiner has not cited language in either reference or within information commonly known to those skilled in the art that provides the necessary motivation or suggestion to combine these two references. Although the Examiner speculates that "it would have been obvious" to make the proposed combination "for the purpose of routing the data" (Office Action, page 5), such speculation is not evidence. Accordingly, for reasons similar to those discussed above with regard to Claims 5-6, 8-21, and 23-25, Applicants respectfully submit that the Examiner has failed to prove a *prima facie* case of obviousness as required by the M.P.E.P.

Second, dependent Claim 22 depends from Claim 12, which depends from Claim 1. Applicants have shown above that Claims 1 and 12 are allowable over the prior art. For at least these reasons, Claim 22 is allowable over the prior art. Additionally, the features recited in Applicant's dependent Claim 22 further distinguish the present invention over the proposed *Krishan-Hoang-Yona* combination. Since Claim 22 incorporates the limitations of Claims 1 and 12, however, which Applicants have shown above to be allowable, Applicants have not provided detailed arguments with respect to Claim 22. However, Applicants remain ready to do so if it becomes appropriate.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claim 22.

**New Claims 34-39 are Allowable**

New Claims 34-39 have been added and are fully supported by the original specification. No new matter has been added. New Claims 34-38 depend upon independent Claim 1.

Claims 34-38 are not anticipated by *Krishan*, whether considered alone or in combination with *Hoang* or *Yona*, because Claims 34-38 include the limitations of independent Claim 1 and add additional elements that further distinguish the art. For example, Claim 34 recites that "the information received by the single board computer comprises telemetry data." As another example, Claims 35 recites that the "single board computer communicates with the management network in response to received information indicating that a first computer communicating with the midplane has exceeded a set temperature." Claim 36 recites that the "single board computer communicates with the management network by instructing a first component of the management network to replicate the data of a second component of the management network." As a further example, Claim 37 recites that the "single board computer communicates with the management network by instructing a first component of the management network to assume the operations of a second component of the management network." Finally, Claim 38 recites that "the first and second connectors comprise first and second high density connectors, the first and second connectors each operable to receive traffic from a plurality of web servers." These features are not disclosed taught, or suggested in the prior art of record.

Claim 39 is also not obvious over the prior art of record. New independent Claim 39 recites "a high density communication path coupling the chip with a third connector, the chip operable to distribute data communications between one of the first and second connectors, and the third connector, the third connector operable to communicate data communications to a management network." New independent Claim 39 also recites "a communication path coupling the chip with a fourth connector, the chip operable to distribute data communications between one of the first and second connectors and the fourth connector, the fourth connector operable to communicate data communications to an Internet." For

reasons similar to those discussed above with regard to Claim 10 and because these additional features further distinguish the invention of the prior art of record, Applicants respectfully submit that new independent Claim 39 is also allowable.

For at least these reasons, Applicants respectfully request consideration and allowance of new Claims 34-39.

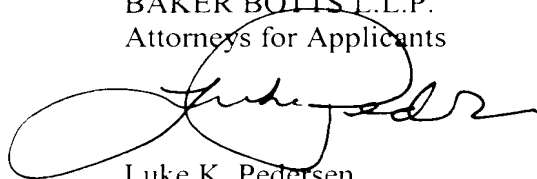
**Conclusions**

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending Claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicants stand ready to conduct such a conference at the convenience of the Examiner.

The Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.  
Attorneys for Applicants



Luke K. Pedersen  
Reg. No. 45,003

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CORRESPONDENCE ADDRESS:  
2001 Ross Avenue, Suite 600  
Dallas, Texas 75201-2980  
(214) 953-6655

Customer No. **05073**